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A Brief Summary of Economic Conditions

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THE YEAR 1939 draws to a close with prices of a number of farm products the highest in 2 years. Farm cash income from marketings and Government payments has been estimated at 8.3 billion dollars for the full year, as contrasted with slightly more than 8.0 billions in 1938. * * * Principal exceptions to higher prices are in hogs and tobacco, adversely affected by heavy supplies, despite the marked improvement in consumers' incomes in recent months. Prices paid by farmers also continue relatively high, and the purchasing power of farm products is in the low eighties (1909-14 equals 100). * * * Production of field crops was slightly smaller this year than last but large supplies have been carried over from preceding years. Notwithstanding a much smaller crop the supply of wheat is only about 50 million bushels smaller than at this time last year. And the world supply of American cotton is the largest on record. More livestock are on the farms this winter than last but there is plenty of feed.

Commodity Reviews

DEMAND: Increasing

THE YEAR 1939 was one of substantial betterment in the factors affecting the demand for farm products. The last half of the year, especially, was characterized by widespread improvement in domestic economic conditions. As measured by the Federal Reserve index, industrial production was within 4 percent of the 1929 peak in October. The upward trend in business activity is still in evidence in early December, according to various weekly indexes, though the rate of increase has been slowing down for several weeks.

There is a tendency for changes in consumer income to lag somewhat behind changes in the volume of business and production. The rise in consumer income was much sharper in October than in September though the increase in industrial production was about the same. The higher level of domestic-consumer demand for farm products attained during the final half of 1939 is expected to be well maintained during the early months of 1940.

There is a fairly widespread and probably well-founded belief that a recession in productive activity is about due, necessitated by the building up of inventories in recent months. There is, however, a notable lack of unanimity concerning the probable extent (amount and duration) of the expected readjustment. This comes about largely through varying opinions of the probable effect of the European war on our exports, especially of industrial products, and of the extent to which capital expenditures by business firms will pick up in response to the improved business conditions of the past 18 months.

It is pretty well agreed that, despite wide variations in the effect on individual farm products, the net effect

of the war on agricultural exports is not likely to be of great significance. But over 90 percent of gross farm income is derived through sales for home consumption, and the farmer's interest in the export market does not stop with farm products. Any appreciable increase in industrial exports, creating additional jobs and buying power among industrial workers, would be important to the farmer.

It is estimated that exports of factory products account for about 7 percent of total production of such products. Industrial workers whose jobs depend directly and indirectly on foreign markets probably consume about as large a portion of the products of American farms as is exported. Any stimulation to exports of industrial products tends to increase the domestic demand for farm products. There is, of course, no way of knowing exactly how much the European war will increase the export demand for United States merchandise but precedent affords ample ground for assuming that the tendency will be in the direction of greater exports.

—P. H. BOLLINGER.

PRODUCTION: Reduced

Production of field crops was slightly smaller in 1939 compared with 1938. Principal crops showing increases were corn, barley, flaxseed, soybeans, and tobacco. Principal decreases were in wheat, oats, rye, and peanuts.

Total acreage of crops harvested was 3 to 4 percent smaller than in 1938, and smaller than in any other recent season except in the drought years 1934 and 1935. Yields per acre averaged slightly higher than in 1938, and substantially higher than in any other recent season except 1937.

Crop yields per acre were unusually

good in the central and eastern Corn Belt, but were seriously reduced by drought from southern North Dakota and eastern Wyoming south through central Texas. Another area of low yields extended from the Gulf into Alabama and northeastern Mississippi.

The only "bumper" crops were tobacco and soybeans: Tobacco, 1.7 billion pounds compared with 1.4 billion in 1938; soybeans, 80 million bushels compared with 58 million in 1938. The corn crop—2.6 billion bushels—was the third largest in 10 years. (Figures based on November crop report.)

INCOME: Increase

Farmers' cash income from marketings and from Government payments was larger in October than in September, and larger than in October last. Total from marketings was 103 million dollars smaller in the first 10 months of this year compared with last, but Government payments were 245 million dollars larger during this period.

Grains, fruits, vegetables, and meat animals show larger income from marketings in the first 10 months of this year. Smaller returns are reported on cotton and cotton-seed, tobacco, dairy products, and chickens and eggs. BAE estimates income from marketings plus Government payments at 8.3 billion dollars for the full year 1939, compared with slightly more than 8.0 billion in 1938.

Month and year	Income from marketings	Income from Government payments	Total
October:			
1939...	\$812,000,000	\$82,000,000	\$894,000,000
1938...	774,000,000	62,000,000	836,000,000
1937...	907,000,000	5,000,000	912,000,000
January-October:			
1939...	5,695,000,000	640,000,000	6,335,000,000
1938...	5,798,000,000	395,000,000	6,193,000,000
1937...	6,728,000,000	355,000,000	7,083,000,000

PRICES: Higher

The index of prices received by farmers stood at 97 on November 15. This was unchanged from October, and compares with 94 on November

Prices of Farm Products

Estimates of average prices received by farmers at local markets based on reports to the Agricultural Marketing Service. Average of reports covering the United States weighted according to relative importance of district and States.

Product	5-year average, August 1909-July 1914	November 1909-13	November 1938	October 1938	November 1939	Parity price, November 1939
Cotton, lb.....	12.4	12.1	8.52	8.73	8.80	15.87
Corn, bu.....	64.2	59.4	40.0	47.6	46.8	82.2
Wheat, bu.....	88.4	87.3	52.0	70.3	73.1	113.2
Hay, ton.....	11.87	11.89	6.82	7.31	7.51	15.19
Potatoes, bu.....	69.7	61.4	54.7	66.4	69.2	86.5
Oats, bu.....	39.9	38.2	22.5	30.3	32.1	51.1
Soybeans, bu.....	(¹)	(¹)	.63	.73	.82	-----
Peanuts, lb.....	4.8	4.5	3.28	3.36	3.39	6.1
Beef, cattle, cwt.....	5.21	5.01	6.32	6.97	6.89	6.67
Hogs, cwt.....	7.22	6.96	7.25	6.52	5.87	9.24
Chickens, lb.....	11.4	10.8	13.6	12.7	12.4	14.6
Eggs, doz.....	21.5	27.8	29.0	22.9	25.8	39.5
Butterfat, lb.....	26.3	28.5	25.0	26.9	28.1	35.8
Wool, lb.....	18.3	18.5	20.7	28.7	27.6	28.4
Veal calves, cwt.....	6.75	6.74	8.27	8.88	8.64	8.64
Lambs, cwt.....	5.87	5.81	6.82	7.60	7.48	7.51
Horses, each.....	136.60	133.00	79.40	78.60	77.60	174.80

¹ Prices not available.

² Revised.

³ Adjusted for seasonality.

15 a year ago. The period 1909-14 equals 100.

Price gains during the last month were reported for wheat, cotton, dairy products, and eggs. Prices of hogs declined, and prices of cattle were about unchanged.

The index of prices paid by farmers continues at 122. Prices received divided into prices paid indicated a purchasing power figure of 80 for November. This was unchanged from October, and compares with 78 in November last year.

Index Numbers of Prices Received and Paid by Farmers

[1910-14=100]

Year and month	Prices received	Prices paid	Buying power of farm products ¹
1938			
November.....	94	121	78
December.....	96	120	80
1939			
January.....	94	120	78
February.....	92	120	77
March.....	91	120	76
April.....	89	120	74
May.....	90	120	75
June.....	89	120	74
July.....	89	120	74
August.....	88	119	74
September.....	98	122	80
October.....	97	122	80
November.....	97	122	80

¹ Ratio of prices received to prices paid.

POTATOES: Prices Up

A crop of 288 million bushels of late potatoes was indicated by November reports. This was about the same as the 1938 production, but about 13 million bushels less than the 1928-37 average. A slight decrease in production in the central late States was about offset by a slight increase in the western late areas. Late supplies in the east are about the same as in 1938.

There was a sharp reduction in the intermediate potato crop, so that market supplies of potatoes this fall were somewhat smaller than in 1938. The smaller supplies together with rising consumer purchasing power re-

sulted in market prices somewhat higher than in the fall of 1938. Prices in eastern markets, particularly, have been higher.

Higher prices have been received for most of the 1939 crop of potatoes marketed to date. As a result, producers are planning to increase plantings in 1940.

CATTLE: On Feed

More cattle will be fed in the Corn Belt this winter than last, but fewer in the Western States. Supplies of feed grains are abundant in the central and eastern Corn Belt, and most of the increase in cattle feeding will be in this region. In the west the feed grain supply is smaller this winter than last, and many cattle have been moved east.

Shipments of stocker and feeder cattle, inspected at stockyards markets, into the 11 Corn Belt States were 16 percent larger from July through October this year than last. Direct shipments also were larger. The total movement—direct and through stockyards—was said to be the largest in 15 years.

Imports of cattle have declined in recent months, and are expected to decrease more in 1940. The movement of cattle out of northern Mexico this year was the largest since 1915. Cattle probably will be held back in Mexico for replacement purposes in 1940. Canada also is expected to have fewer cattle available for export.

Slaughter supplies of cattle and calves increased seasonally in recent months, and prices of all grades of slaughter cattle have declined since the sharp rise in early September. In mid-November, farm prices of beef cattle averaged \$6.89 per hundred-weight as compared with \$6.32 a year earlier.

POULTRY: More Layers

The number of laying birds in farm flocks was 4 percent larger this November 1 than last, and the number of pullets not yet of laying age still to be added to flocks was slightly

larger than a year ago. The rate of egg production per layer continued high, but was slightly below last year's high record.

The average number of layers per flock—about 76 birds—on November 1 was the largest for that date since 1930. The 1928-37 average was 74. Total egg production was about 3 percent larger than on November 1 a year ago, and about 24 percent above the 10-year November 1 average.

Producers were getting lower prices for chickens and eggs this November than last. BAE forecasts for 1940 smaller hatchings than in 1939, larger laying flocks, larger egg production, and increased marketings of eggs. Supplies of poultry meat will be larger in the first half of 1940 than in 1939, but smaller in the last half of the year.

COTTON: Prices Up

Features of the cotton situation are the continued high rate of domestic mill activity, the increase in cotton exports this season, and the higher prices at which cotton is selling this year compared with last. Mills have been busy filling orders booked early in the fall. Sales of finished goods have been only fairly well maintained.

United States exports of cotton totaled 2,158,000 bales from August 1 to November 23. This was 710,000 bales more than during the like period in 1938. Reports are that mills in Great Britain are operating at a high rate, and that bookings of yarn and cloth orders equal or exceed mill output.

Prices of Middling 15/16-inch cotton averaged 9.61 cents in the 10 spot markets for the week ended November 24, as compared with 8.93 cents a year earlier. Farmers were averaging 8.80 cents per pound for cotton in mid-November, as compared with 8.52 cents in November 1938.

The world supply of cotton has totaled about 50 million bales in each of the last 3 seasons. World consump-

tion averaged about 28 million bales during this period. On the basis of consumption prospects, the world carry-over on August 1 next will be only a little smaller than the exceptionally large carry-over of 21.5 million bales on August 1 last.

About 14 million bales of the carry-over on August 1 last was American cotton. This was 69 percent larger than the average for that date in the last 10 years. It was the largest carry-over on record of American cotton.

WHEAT: Stocks Reduced

Supplies of wheat in the United States are only about 50 million bushels smaller than at this time last year, even though the 1939 crop was about 190 million bushels less than the 1938 production. The difference is due to an increase of about 100 million bushels in the carry-over from last year, and a reduction in the quantity of wheat fed to livestock this season compared with last.

If exports should total about 50 million bushels this season, the carry-over of wheat on July 1 next may be somewhat larger than in 1939, when it totaled 254 million bushels. The largest carry-over on record was about 360 million bushels in 1933. Farmers, however, have reduced their acreage of winter wheat this year, and yields affected by the dry weather are likely to be less than those of last year and less than average.

Domestic wheat prices advanced during November, reflecting continued dry conditions in the western part of the hard Red Winter wheat belt, and relatively small marketings. Wheat has been withheld from market in anticipation of higher prices, by the Government loan program, and the poor outlook for winter wheat. About 157 million bushels of wheat were under Government loan in mid-November, as contrasted with only 40 million bushels a year earlier.

Wheat prices in the United States

are expected to continue to average relatively high compared with prices in other surplus-producing countries, so long as the Government loan and export subsidy programs continue and world prices remain low.

LAMBS: Feeding

More lambs have been fed to date this season than last, but the lambs went into the feedlots early; marketings of these lambs have increased, and on January 1 the number on feed may be about the same as at the beginning of 1939. Increased numbers in the Corn Belt will probably be offset by decreases in Western States.

It appeared in November that about the same number of lambs would be fed this season as last in the eastern Corn Belt, more in the western Corn Belt, and about the same number in the Scottsbluff area of Nebraska and Wyoming. Feeding in Western States will be smaller notwithstanding increases in Montana, New Mexico, and California.

Pasture prospects were poor in the Southern Great Plains in late October and few feeder lambs had been shipped to wheat pastures in Kansas and Oklahoma. But there has been a fairly large movement of lambs to the Panhandle districts of Texas and the number of lambs fed in Texas may be as large this year as last.

Slaughter supplies of lambs will be larger—December through April—this season than last. But the effects of this increase will be offset by the better consumer demand for meats and the higher prices for wool from slaughter lambs. About the same number of stock sheep will be on farms and ranches this January 1, as last.

HOGS: Prices Decline

Practically all of the sharp rise in prices of hogs in early September has been lost. Prices to farmers averaged lower this November than last, as the increase in marketings more

than offset the improvement in consumer buying power. Inspected slaughter has increased considerably since September and has been running larger this season than last.

About 83 million pigs were produced in 1939. This compares with the low record of 55 million in 1935. The 1939 pig crop probably is one of the 5 largest crops on record. Feed has been abundant, and hogs marketed to date have been heavier this year than last.

The peak of winter marketings usually is in December. This season the peak may be in January since feed is plentiful and marketings will be heavier from the western Corn Belt. Also, the seasonal reduction in marketings of hogs in late winter and early spring may be less than average.

BAE looks for a stronger consumer demand for meats this winter than last, but not enough stronger to offset the effects of the large increase in supplies of pork. Exports of pork and lard have been larger in 1939 than in the preceding 2 years, and are expected to increase more in 1940.

The Bureau says, "Of all farm products, hogs are the only important one for which a significant expansion in exports is probable for 1939-40 as a result of the European War." Nevertheless, the prospective improvement in domestic demand is expected to be much more important as a price-supporting factor.

WOOL: Strong Support

United States prices of wool in 1940 will be strongly supported by the prospective improvement in domestic consumer demand and by increased foreign demand arising from the European War. It is possible, though, that much of this strength has already been discounted in higher wool prices. The quantity of Australian and New Zealand wools released by the British Government for export to neutral countries will be an important factor affecting wool prices here and abroad.

Mill consumption of wool in the United States was about 50 percent larger in the first 9 months of this year compared with the like period of 1938. Consumption for the entire year is likely to be larger than in any recent year except 1935. And prospects are favorable for continuation of a relatively high level of mill consumption in 1940.

Stocks of apparel wool held by United States dealers and manufacturers, including wool afloat, totaled 244 million pounds, grease basis, on September 30. This was about 77 million pounds less than on the same date last year, and the smallest supply as of September 30 in the last 5 years.

Imports of apparel wool into the United States totaled 61 million pounds in the first 9 months of this year, compared with 18 million in the same months of 1938. A considerable increase in wool imports is expected until the 1940 domestic clip becomes available.

DAIRY: Prices Up

Prices of dairy products have registered more than the usual seasonal advance since mid-summer. Consumption of products has been high relative to production. Stocks have been reduced. Additional indication of improvement is the increased consumer buying power flowing from greater activity in business.

Milk production on November 1 was about equal to the peak output for that date established last year. Production is expected to be about as large this winter as last. There are more milk cows on farms and supplies of feed are relatively large. Approximately 5.8 million heifer calves will be on farms January 1—the largest number on record.

The increase in heifer calves saved in the last 2 years indicates an increase in numbers of milk cows in 1940 and 1941. The actual increase will depend largely upon the rate of culling. During the last 20 years the number of

cows eliminated from herds has been much more variable than the number of young stock added to herds.

Increased consumption of fluid milk and cream has been forecast for 1940. Production of manufactured dairy products will be about the same as in the last 2 years. Cold storage stocks of butter totaled 128 million pounds on November 1, or about 34 percent less than the excessively large stocks a year earlier; stocks of American cheese were the smallest for November 1 since 1932.

FEED GRAINS: Ample Supply

Supplies of feed grains, including sealed corn, total about 110 million tons this season, compared with 104 million last year, and with 101 million average for the period 1928-32. But there is more livestock to be fed than a year ago and nearly as many as during 1928-32. The supply of feed grains per animal unit is 2 percent smaller this year than last, but 10 percent larger than the average during the period 1928-32.

The supply of corn, estimated at 3,152 million bushels, is the largest since 1932. The 1939 corn crop has been estimated at 2,591 million bushels, and the October 1 carry-over was 561 million bushels. The grain sorghums crop was estimated on November 1 at 86 million bushels, compared with 101 million in 1938.

Total supplies of feed grains will be ample for feeding requirements in practically all parts of the Corn Belt east of the Missouri River. Supplies will be short in drought areas of the western Corn Belt. The recent decline in prices of fat cattle and hogs makes the hog-corn and the beef-corn ratios less favorable to livestock feeders, but these ratios are still somewhat above average.

Prices of corn, oats, and most types of byproduct feeds have advanced since early October. The higher prices of feed this year over last are apparently the result of a more favorable

domestic demand, which is more than offsetting larger supplies.

A Government loan rate of 57 cents a bushel has been announced for 1939 corn. About 40 percent more farmers in the commercial corn-producing area are eligible for the loan this year than last. This together with the policy of the Government to hold all 1937 and 1938 corn in storage may bring the total quantity of corn held by the Government or under seal during the 1939-40 marketing year to about 500 million bushels.

RICE: New Crop

Threshing of rice was practically completed in the Southern States in mid-November. Harvesting of the crop in California was nearing completion. AMS reported a slackening of domestic trade in early December. Export business was dull.

The supply of rough rice in the Southern States for commercial use was estimated at 11.8 million barrels, or about 100 thousand more than was used commercially last season. The supply of rough California rice was estimated at 4.3 million bags, or about the same as was accounted for in 1938.

PEANUTS: Small Crop

Production of peanuts is the smallest since 1935—approximately 1.1 billion pounds, as contrasted with 1.3 billion in 1938. Acreage was the largest on record, but yields were below average. Yields in the Southeast are much below earlier indications.

A month ago it appeared that about 250 million pounds of peanuts would be available for crushing in 1939-40. This estimate is now reduced to 100 million pounds. Average was 265 million pounds during the period 1934-38, as compared with about 70 million in the period 1929-33.

Production since 1934 has been in excess of utilization by the usual trade outlets, but prices to growers have been maintained at fairly high levels by the diversion program of the AAA.

TRUCK CROPS: Fall Plantings

An increase of about 5 percent in fall plantings of truck crops this year compared with last was reported in November. Acreage of fall and early cabbage, fall carrots, cauliflower, peppers and tomatoes, and early lettuce and onions is larger than in the previous season.

SOYBEANS: Record Crop

A new high record crop of soybeans was produced this year—approximately 80 million bushels as compared with 58 million in 1938. About 87 percent of the 1939 crop will be available for crushing and export during the 1939-40 season. Exports from the United States are expected to set a new high record, partly because of the difficulties in shipping Manchurian soybeans to Europe.

United States production of soybean cake and meal is expected to reach a new high record of about 1.3 million tons, as compared with a little more than 1 million tons last season. Supplies of feed grains for 1939-40 will be slightly larger this year than last, but the number of livestock to be fed is much larger than a year ago. The demand for feedstuffs generally is likely to be somewhat stronger than in 1938-39.

Production of soybean oil was about 415 million pounds for the 1938-39 season. Production in 1939-40 is expected to total about 500 million pounds—a new high record. Food products account for about 80 percent of the total consumption of soybean oil, and drying oils and soap for most of the remainder.

The farm price of soybeans in November was about 82 cents, as compared with 68 cents in November 1938. These prices are low as contrasted with prices received for the 1936 and 1937 crops, but are favorable as compared with returns from competing crops. Further expansion in soybean acreage is expected in 1940.

FRANK GEORGE

We Asked The Economists—

Economists make surveys, ask questions, publish the results. Turn about! *The Agricultural Situation* recently asked economists and sociologists in BAE two questions: (1) What do you regard as the outstanding problems of agriculture? (2) What do you think should be done about these problems? Here are the answers.—Ed.

CURRENT problems in agriculture may be divided into three classes: (1) Commercial producers of agricultural products are concerned with endeavoring to find some device or some series of devices which will enable them to stabilize acreage, prices, and marketings in order that the income from the sale of agricultural products may be raised and stabilized; (2) some means of improving income and living conditions among the underprivileged agricultural classes—agricultural workers, share-croppers, subsistence farmers, and victims of recurring drought and flood—must be found; (3) farmers and the nation generally are interested in bringing about a better pattern of land use in order to conserve soil, water, and forests, and in order to conserve human effort.

Within the decade ahead it is desirable to make every effort to sustain the gains that have been made during the decade just closing, which means that farmers and agricultural workers will have to continue to devote their attention to improving the processes by which farmers can work collectively toward a common goal. But it is probable that increasing attention should and will be given to the development of policies which will improve conditions among the underprivileged classes. These are problems which must be solved if the price and marketing programs of the commercial

producers are to be successful and if young farm people destined for urban occupations are to be properly educated.—O. V. WELLS.

* * * *

DURING the period of westward expansion, lasting for approximately 150 years, we developed an unexpressed philosophy concerning the successful ways of life, and the most important current problem confronting agriculture is to explode the fallacies of this philosophy or these creeds. The creeds are that success inheres in the perpetual expansion and continued exploitation of natural resources, and that the dominant technique of success is that of speculation. There must be substituted for these creeds the creeds of conservation and security.

These problems must be solved and these new philosophies built through the process of widespread education, including adult education, and the democratic process of planning. These two processes can and must be part and parcel of each other.—CARL C. TAYLOR.

* * * *

AMONG the important current problems of agriculture I would list: (1) Maladjustments of production and demand as between agriculture and industry; (2) the development of greater efficiency in processing, transportation, marketing, and distribution.

(1) The maladjustment as between demand and production must be met within the next 10 years by measures which will raise the demand for farm products substantially and by measures which will adjust production to prospective needs. In the next 10 years we should put great emphasis on raising the demand for farm products. This means, of course, not only an agricultural program, but a sound program for industry and labor. There is

much to be done, however, on production adjustments, particularly if practicable ways are to be found for increasing and stabilizing industrial production, with less emphasis, at least, on limiting agricultural production.

(2) So far we have not developed much of a basic national program on marketing. We have tinkered with parts of the marketing system occasionally, but have not done very much to promote efficient marketing or to promote marketing policies for the benefit of the whole public. The trade agreements under the NRA and the marketing agreements of the AAA have done very little along this line. Both have been used mainly as devices to raise and maintain prices to producers. Neither one probably has had very much effect on the structure of the market, or upon marketing costs. In the next 10 years I think we are bound to have more emphasis on market planning aimed at bringing about rather substantial readjustments in the whole marketing structure.—FREDERICK V. WAUGH.

* * * *

THE PRINCIPAL current problems of agriculture are: (1) Excessive man power engaged in agriculture, with consequent limitations on the possibilities for improving agricultural income; (2) better coordination of the various public efforts to improve agricultural conditions so as to achieve more effectively the long-time as well as the emergency objectives of our farm program.

The things that should be done during the next 10 years to deal with these problems are: (1) Restoration of full employment opportunities in industry on a peace-time basis; (2) establishment through Congressional action of agricultural planning as a function coordinate with extension and research as a means of improving the effectiveness with which public funds are expended as direct aids to agriculture.—BUSHROD W. ALLIN.

* * * *

THE principal current problem of agriculture is to maintain the improvements already realized out of the depression, and to complete the desirable readjustments under way so as to provide a sounder economic basis for progress on farms. The cotton producers must make some fundamental readjustments to produce smaller quantities of cotton and at relatively low costs. Corn and hog producers have the problem of readjusting their production programs. There is a surplus of corn to be worked off and too many hogs coming to market to maintain prices at a level which will yield fairly satisfactory returns. Finding an outlet for surplus farm labor and improving living conditions of low-income families are important problems.

The solution of these problems lies partly outside of agriculture but farmers and national farm policy makers can contribute materially in the next 10 years toward improving conditions on the farm. The greatest contribution that could be made would be to withdraw some farmers and farm laborers from the field of agricultural endeavor and provide for them more adequate purchasing power from other sources. Increased industrial employment and an extension of social security payments can contribute materially to this end.

The emergency adjustment and relief powers should be directed more specifically toward securing readjustments in the production of cotton and of corn so that the producers of these commodities can stand on a sounder basis, with lower production costs and with a volume of production adjusted in line with demand and in relation to these costs.

An important contribution could be made by securing further economies in distribution costs so as to reduce the margin between farm and retail prices of foods. This could be particularly significant in the case of milk and of some fruits and vegetables. The most significant development in

the field of distribution is the stamp plan for distributing surplus essential foodstuffs to low-income families.

The crop-insurance program should be developed and extended to other products. Federal and State services with reference to improving methods of production and conditions of living on farms should be extended more completely to small and low-income farmers, tenants, and operators so as to improve the income and living conditions of a large section of the farm population.

A sound long-time national program for agriculture requires a continuation of emergency powers, but also the development of conditions on the farm which will require rather infrequent use of these powers.—O. C. STINE.

* * *

PRINCIPAL current problems of agriculture are: (1) To educate people in towns and cities regarding the sound elements of a desirable national agricultural program; (2) to achieve a proper balance between commercial farming and a "live-at-home" program; (3) to decentralize recreational and educational facilities so as to bring them within the reach of farmer control as well as attendance.

What to do about these problems in the next 10 years? (1) Carry the Department educational activities to the cities and towns, especially the latter; (2) place more emphasis, in agricultural legislation and administration, on the farm as the unit; (3) place more responsibility on local farm leadership.—CARL F. TAEUSCH.

* * *

PROBABLY the most pressing current needs of American agriculture are: (1) To raise the level of farm incomes by the creation of larger continuing effective demands for agricultural products in both the domestic and foreign markets; (2) to readjust land use so as to alleviate present distress and prevent future distress resulting from improper land use and

settlement, help stabilize farm income, and conserve our land resources; (3) to develop more effective means for raising the level of living of our underprivileged farm families including farm laborers, and to improve the landlord-tenant relationship in the interest of promoting profitable and conservation land use; (4) to find a satisfactory solution of the debt and taxation problems affecting the farmer.

In general, the newly established relationship between the Government and agriculture should be continued and made more effective to achieve these goals. More specifically there should be: (1) Continued efforts toward increasing effective foreign and domestic demand for agricultural products through (a) research into possible new uses for such products, (b) extension of the use of the two-price system at home, (c) stabilization of industrial incomes, and (d) continuation of the reciprocal trade program; (2) continued efforts toward a solution of our problems of land use maladjustment by means of the submarginal land retirement, forestry, soil and water conservation, and grazing programs; (3) continued efforts toward the building of coordinated and integrated agricultural programs through land use research and planning, education, and farmer participation by means of local planning groups.—HUGO C. SCHWARTZ.

* * *

IT IS essential that purchasing power, both domestic and foreign, be increased to a higher level to enable the free flow of agricultural products into commerce at remunerative levels. This, in part, will assist in bringing about a better adjustment of our surplus farm population relative to available land resources.

The plowing up of the sod and the soil-depleting practices dating back to the war period lead to soil problems which were intensified by the drought years and by practices adopted during the depression. The rebuilding of our

soil in a large portion of our agricultural areas is thus of dominant importance.

What should be done about these problems? While the recent war developments lend a degree of uncertainty as to future policies, it is essential that every encouragement be given to increasing private investment in order that the national income may support a higher level of production and/or prices for agricultural commodities. Renewed efforts must be made to facilitate a freer exchange of goods in international trade, including policies which will facilitate a redistribution of our excessive gold supplies. Continued encouragement must be given to the expansion of soil-conservation practices and in facilitating a higher standard of living through improved farming and credit practices. NORMAN J. WALL.

* * * *

THE PRINCIPAL current problems are to find ways of obtaining satisfactory incomes to all groups engaged in agriculture—the laborer and the share cropper as well as the farm operator. This requires the development of agricultural policy and pro-

grams in terms of national economic welfare with due regard to the final needs of consumers for farm products. We must answer the question, What kind and how much agriculture do we need to maintain and to advance the general welfare and social well-being of the Nation? Our conservation and land use programs must be related to this.

What should be done about these problems in the next 10 years? We need to integrate our public programs to fit the needs of farmers within the aim of an agricultural policy that is conceived in terms of national economic welfare. In view of shrinking foreign markets and the large reservoir of unemployed in industry, it seems necessary to start our considerations of necessary adjustments with the present situation in local areas and to develop the best middle-term adjustment that is possible. We then need to work out a long-term goal of adjustment by areas that will yield satisfactory incomes to the groups engaged in agriculture, with due regard for the needs of the consuming population. Individual action and public programs can then be pointed in the direction of this long-term goal.—SHERMAN E. JOHNSON.

Eventful Decade

IN 1930 agriculture was on the way down. As we enter 1940 it is on the way up. Between those mileposts lies an historic effort at readjustment to the economic forces generated by one of the greatest of all wars as well as to longer time forces whose impact has been heavy in these years.

It was back in 1920 that our vast farm business plunged into the long postwar era of deflation and distress. By 1930 it was slipping deeper into depression. We are still close enough to that chapter of agricultural history to remember well the circumstances which ushered in this present decade.

We still can recall the mass marches upon State legislatures, the crowds that stopped foreclosure sales and threatened judges, the armed deputies who rode convoy through bitter milk strikes, martial law in Iowa, the farm "holiday" movement, the political battles, and all the spreading symptoms of desperation on the farms of this country.

NINETEEN-THIRTY opened in an atmosphere of approaching crisis. The stock market had crashed. The grain and cotton markets likewise. The Federal Farm Board had been

created the previous summer and was buying wheat and cotton in an attempt to stabilize prices. But prices plunged on downward. Deflation, debt, and nationalistic struggles rode the markets of the world.

Cash farm income that had been more than 11 billion dollars in 1929 dropped to less than 5 billions in 1932. Foreclosure sales of farms had risen to a peak by 1933. Tax delinquency, already serious enough in the late 1920's, had increased tenfold in some agricultural States by the early 1930's. The farm organizations were demanding emergency action by the Government in the fields both of surplus control and of monetary action. Country merchants and businessmen dependent upon farm trade were going bankrupt at a rate thoroughly alarming to the business community. Moratoriums were being declared in State after State. Many towns had been reduced to the use of scrip instead of cash.

AROUND the first of March 1933, came the banking crisis, followed by the call for a special session of Congress. Then began the remarkable action program which was to loom large in the agricultural picture through the rest of the decade. The Agricultural Adjustment Administration was created, and the Farm Credit Administration. The gold program was begun, devaluing the dollar. The beginning effect of the measures taken in those weeks was almost immediately apparent—the pressure of deflation was abruptly eased, commodity prices began to rise, the atmosphere of imminent chaos began to clear up.

Said the Chicago market dispatches of May 12, 1933, "The Board of Trade here, bread basket of the world, gleefully saw grains smash all high records for the season, with talk of dollar wheat based on today's top of almost 79 cents. A similar scene was enacted in the livestock yards, with peak prices for hogs, steers, and lambs

putting millions of dollars into the pockets of the farmers." This was only 2 months after the whole country and especially the agricultural community had faced one of the gravest economic crises in its history. The spring of 1933 had been a turning point.

OF COURSE the farm debts and the fundamental dislocations in agricultural production represented a problem which could be dealt with only by a long-time program. Later that year the AAA launched its program of curtailment of wheat, tobacco, and cotton acreages and presently its corn-hog and other programs, with benefit payments to cooperating farmers financed by a processing tax on the commodities. The Farm Credit Administration likewise began a widespread distribution of funds to relieve the critical mortgage situation.

On the whole, thereafter, the course was upward although not without its slumps and setbacks, among them the severe droughts of 1934 and 1936 which seriously damaged the struggling livestock industries. In 1936 the processing tax was declared unconstitutional by the Supreme Court; but the benefit payments to cooperating farmers were continued under the Soil Conservation and Domestic Allotment Act of that year. During the ensuing 3 years other important legislation was passed, providing machinery for further stabilizing the markets through marketing agreements, commodity loans, and purchase of surpluses for relief distribution; also direct aid for tenants and certain of the most distressed groups.

Since 1933 the AAA has paid to farmers nearly 3 billion dollars. The Farm Credit Administration has loaned nearly 6 billion dollars. In addition, some 1½ billion dollars have been loaned by the Farm Security Administration, the Commodity Credit Corporation and other agencies to growers

of cotton, corn, wheat, and other farmers to help cushion the marketing of their products and set up national reserves, for rehabilitation, and for the purchase of farms by tenants .

THE agricultural situation still has its serious problems. It could not be expected that the dislocations resulting from the postwar deflation, added to the culminating pressure of profound changes in such basic forces as population, international trade, land tenure, mechanization, and the like, would be solved in a year or a few years. Cash farm income is still too low, although it has risen from the 4.7 billion figure of 1932 to around 8.3 billions for 1939. Tenancy has increased rather disturbingly in this decade. So has the ownership of land by big corporations. The whole question of the wise and economic use of the country's land resources underlies the disposition of numerous other adjustments.

Our hog, wheat, tobacco, cotton, and fruit growers are still struggling to readjust their enterprises to a changed pattern of world trade. In-

deed, the loss of some of our traditional foreign outlets has been one of the most complicating factors these last 10 years. Added to it are the further problems incident to a slowing up in the growth of our urban population, plus the readjustments required by the epochal shift from animal to mechanical power on the farms. We have become conscious that depletion of the soil now approaches a national threat and must be checked, a matter that will require long and steady effort.

BUT DESPITE all these real and continuing difficulties, the fact remains, as we stand on the threshold of 1940, that American farming, as a going business, is in far better position than it was in the first few years of the decade. Land values have advanced about 16 percent since 1933, which is the final evidence of improved conditions and confidence. The main story that agricultural historians will write of this passing decade is one of slow recovery in the face of heavy odds—a long, winning fight upward out of insolvency and despair.

A. B. GENUNG.

Cranberries—\$5,000,000 Industry

SEVENTY years ago the production of cranberries was regarded as a "gamble." Now it is a 5-million-dollar industry. Production in 1939 has been estimated at 668,000 barrels. Acreage has increased only about 8 percent during the last 30 years, but production increased about 37 percent during this period, and the farm value of the crop increased approximately 57 percent.

The early Pilgrims found cranberries growing wild in the bogs of Massachusetts, but no effort was made to commercialize production until about 1850. Cultural practices were then developed, varieties were improved, yields per acre were increased. For years, the berries were marketed fresh largely for the Thanksgiving and

Christmas holidays. Canning processes were then developed. Now the berries are marketed fresh or processed practically the year round.

Acreage has been kept relatively stable during the last 30 years, since the area suitable for the production of cranberries is limited by physical conditions. Production is in 5 States—Massachusetts, Wisconsin, New Jersey, Washington, and Oregon—where the crop is grown on less than 30,000 acres. Massachusetts leads in 1939 production (465,000 barrels), followed by Wisconsin (103,000 barrels), New Jersey (80,000 barrels), Washington (14,000 barrels), and Oregon (6,000 barrels).

HOWE BANCROFT.

Cash Income From Farm Products

CASH INCOME from farm marketings in 1939 seems likely to total approximately \$7,625,000,000, or about the same as in 1938. This is 63 percent larger than the cash income of \$4,682,000,000 in 1932. Direct Government parity and adjustment payments to farmers on account of soil conservation in 1939 will total about \$675,000,000—a material addition to the cash available to farmers. Government payments constituted in 1939 an addition of 8.9 percent to the cash income of farmers, or about \$97 per farm and \$21 per person living on farms. The income from farm marketings in 1939 is estimated to be about 29 percent greater than the pre-war average of \$5,900,000,000.

As shown in the accompanying tables and chart, the income from farm marketings has varied greatly in the last 30 years—ranging from a high of \$14,436,000,000 in 1919 to a low of \$4,682,000,000 in 1932. Receipts from marketings increased rapidly during the World War period—from \$6,000,000,000 in 1914 to more than \$14,000,000,000 in 1919. The first post-war depression resulted in a decline of about 40 percent. Recovery from the depression of 1921 raised cash income to \$11,200,000,000 in 1929, but this was reduced by more than 50 percent during the great depression which followed through 1932.

IN COMPARING cash income in recent years with pre-war years, consideration should be given the fact that the prices farmers have to pay for commodities and services used in production and living average about 20 percent higher now than in pre-war years, and that taxes are materially higher. Another important fact is the increasing mechanization and commercialization of agricultural production, involving larger expenditures for equipment and materials used in production.

The number of farms in the United States has remained relatively stable

The Bureau of Agricultural Economics, assisted by specialists now associated with the Agricultural Marketing Service, has compiled and published during the last 2 years—as required by the Agricultural Adjustment Act of 1938—income estimates covering most of the principal farm products for the calendar years 1910 to date.

These estimates have now been brought together in a series of estimates of total cash income from marketings of farm products for the calendar years 1910–39. This series is a revision of all previously published estimates of total cash income from marketings.

To round out the picture of farmers' income *The Agricultural Situation* will publish in subsequent issues estimates of additions to income in the form of food, fuel, and housing furnished by the farm, and estimates of income from sources other than agriculture.

Estimates of annual expenditures for commodities and services used currently in production, of expenditures to maintain the farm plant and equipment, and of sums paid out on account of rent, taxes, interest, and hired labor also will be published.—Ed.

during the last 30 years. Available data indicate that the number has increased since the depression of 1929–32, and that the number of farms at the beginning of 1939 was probably about 8 percent greater than the pre-war average. The number of persons on farms also has been relatively stable. Apparently the number of persons on farms is now slightly less than in the years 1910–14.

The great variation in cash income, with a comparatively stable number of farms and of population on farms, results in marked changes in the per capita cash income of persons on farms. It is estimated that in 1939 cash income from marketings will be about \$1,100

per farm and \$238 per person on farms. The pre-war average was \$922 per farm and \$184 per person on farms. Between these 2 periods, the income per farm ranged from \$2,231 in 1919 to \$717 in 1932, and the income per person ranged from \$467 to \$151 in the same years.

DIRECT government adjustment, conservation, and parity payments have contributed materially to the cash income of farmers in the last 7 years. Relative to the total, however, these payments may seem unimportant, since payments in 1933 were equivalent only to about 2.5 percent of the income from marketings, and the largest payments made—in 1939—were equivalent only to 8.9 percent of the receipts from marketings.

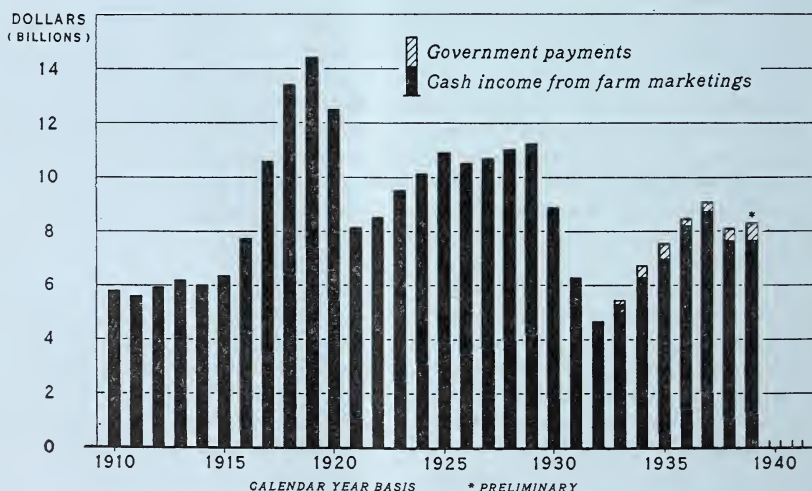
While the adjustment and conservation payments have involved some expenditures by farmers, they have been to a considerable extent a net contribution to cash income and certainly have represented material additions to the cash income of many farmers. Moreover, these payments do not represent the full extent of the contribution of the Federal Government to the income of farmers: Loans have supported prices in some years, and the products placed under loan

have been treated as sales, the loan values being taken as the prices.

ANNUAL estimates of the number of farms and of persons living on farms are presented in connection with the annual estimates of cash income, so that the changes in income over a period of years may be related to changes in numbers of farm operating units and to the number of persons living on those farms. It should be noted, however, that the per farm and per capita estimates are not measures of the average income of farmers or of persons living on farms, since farmers receive a considerable part of their income in the form of food, fuel, and housing furnished by the farm, in addition to the cash income from the sale of farm products.

Nor should the estimates of cash farm income be taken as a measure of total income available to farm families for living. Farmers and other persons living on farms receive considerable income from sources other than agriculture. And from the total should be deducted expenditures for hired farm labor, and many other cash expenditures on account of production—taxes, interest, and rent paid to non-farmers—in ascertaining the funds available for investment and for living.

CASH FARM INCOME, UNITED STATES, 1910-39



SOME rough calculations have been made of income including the value of products supplied by the farm for family living, and of expenditures on account of production, taxes, interest, and rent paid to others. These approximations are mentioned here merely to give perspective to the whole farm income picture, pending publication of official estimates covering the various items.

Estimated roughly, the farm value of products retained for home consumption and the residential value of farm homes occupied was about \$2,000,000,000 in 1939. In addition, farmers may have received approximately \$2,000,000,000 from nonfarm sources. As against this, the annual expenditures for commodities and services used currently in production during the last 3 years have averaged a little more than \$2,000,000,000. Approximately \$2,000,000,000 was paid out on account of rent, taxes, interest, and hired labor. About \$1,000,000,000 was required to maintain the farm plant and equipment.

O. C. STINE,

Chairman, Income Committee.

[The estimates of cash income from marketings, as presented in the accompanying tables and chart, have been made for each calendar year so as to fit into annual calendar-year estimates of national income. They are constructed by applying to estimates of the quantities marketed in each month a farm price, estimated as of the middle of the month, so that they may be extended monthly in coming years. They indicate approximately the cash annually available during the calendar year to the owners and operators of farms from the sale of farm products, and they represent the money purchasing power derived from farm production. Beginning January 1940, the Bureau will discontinue its monthly estimates of receipts from the marketings of principal crops, by States and for the

United States. Monthly estimates of cash income from marketings, constructed so as to be comparable as nearly as is possible with the revised estimates of cash income from marketings, will be issued instead.]

**Cash Income From Farm Marketings—
Total, Per Farm, and Per Capita—
United States, 1910-39**

Year	Cash income ¹	Number of farms January 1	Cash income per farm	Farm population January 1	Cash income per capita
	<i>Million dollars</i>	<i>Thousands</i>	<i>Dollars</i>	<i>Thousands</i>	<i>Dollars</i>
1910---	5,785	6,362	909	32,077	180
1911---	5,581	6,390	873	32,110	174
1912---	5,966	6,420	929	32,210	185
1913---	6,251	6,450	969	32,270	194
1914---	6,015	6,480	928	32,320	186
1915---	6,391	6,520	980	32,440	197
1916---	7,755	6,560	1,182	32,530	238
1917---	10,648	6,540	1,628	32,340	329
1918---	13,464	6,520	2,065	31,770	424
1919---	14,436	6,470	2,231	30,930	467
1920---	12,553	6,448	1,947	31,614	397
1921---	8,107	6,500	1,247	31,763	255
1922---	8,518	6,510	1,308	31,749	268
1923---	9,524	6,400	1,488	31,130	306
1924---	10,150	6,350	1,598	30,817	329
1925---	10,927	6,372	1,715	30,830	354
1926---	10,529	6,340	1,661	30,619	344
1927---	10,699	6,260	1,709	30,170	355
1928---	11,024	6,270	1,758	30,188	365
1929---	11,221	6,290	1,784	30,220	371
1930---	8,883	6,289	1,412	30,169	294
1931---	6,283	6,390	983	30,497	206
1932---	4,682	6,530	717	30,971	151
1933---	5,278	6,720	785	31,693	167
1934---	6,273	6,770	927	31,770	197
1935---	6,969	6,812	1,023	31,801	219
1936---	8,212	6,830	1,202	31,809	258
1937---	8,744	6,820	1,282	31,729	276
1938---	7,627	6,850	1,113	31,819	240
1939---	7,625	6,920	1,102	32,059	238

¹ From marketings (excludes government payments).

Cash Income and Government Payments—Total, Per Farm, and Per Capita—United States, 1910-39

Year	Government payments	Cash income and Government payments		
		Total	Per farm	Per capita
	<i>Million dollars</i>	<i>Million dollars</i>	<i>Dollars</i>	<i>Dollars</i>
1933-----	131	5,409	805	171
1934-----	447	6,720	993	212
1935-----	573	7,542	1,107	237
1936-----	287	8,499	1,244	267
1937-----	367	9,111	1,336	287
1938-----	482	8,109	1,184	255
1939-----	675	8,300	1,199	259

The Food Stamp Plan

THE FOOD stamp plan has two principal objectives: (1) To raise farmers' incomes by increasing the distribution and consumption of their products; (2) to use these food surpluses so as to improve the diets of undernourished families in this country. Under the stamp plan all food commodities are handled through the normal channels of trade, thus contributing toward improved business conditions in general.

This effort to meet recurrent farm problems and the dietary needs of underprivileged people is a continuation and extension of many past and current activities. Among the major previous Federal efforts were the disposition of about 95 million bushels of wheat and 850 thousand bales of cotton during 1932 and early 1933, held by the Federal Farm Board.

With the passage of farm and relief legislation in early 1933, though overshadowed in public notice by adjustment provisions of farm programs, disposition of surplus commodities through relief channels was considerably expanded. During 1934 and 1935, a major drought relief program involved the salvage of cattle, sheep and goats for human consumption.

SINCE 1936, the activities have been carried on primarily under legislation which annually makes available to the Secretary of Agriculture 30 per cent of the customs revenues in order to encourage domestic consumption of agricultural commodities, diversions into export channels, by-products and low price outlets, and the development of new uses for agricultural commodities. Additional funds have been made available to encourage domestic consumption by needy families during the current fiscal year.

During the year ended June 30, 1939, the Federal Surplus Commodities Corporation purchased nearly 40 agricultural commodities at a total cost

of about 66.6 million dollars. These were donated to State Welfare Agencies for relief distribution. The direct purchase and distribution programs are continuing. A substantial outlet for farm surpluses is being developed in a rapidly expanding program to provide free school lunches to needy children.

THE FOOD stamp plan is the newest approach to the development of wider markets for agricultural commodities among needy people in this country. The mechanism for bringing about this food expansion involves the use of blue surplus food stamps. These are issued to needy unemployed persons certified by local Welfare Agencies. They can be used to buy specified surplus commodities through retail food establishments.

The program was begun in Rochester, New York, during May, 1939. By early September, Dayton, Ohio; Seattle, Washington; Birmingham, Alabama; Des Moines, Iowa; and Pottawatomie County, Oklahoma, had been added. In August 1939, the Secretary announced that a gradual expansion in the program appeared justified on the basis of analysis of the experience to date. By November, the program had been announced in the following additional areas: Salt Lake City, Utah; Denver, Colorado; Allentown and Bethlehem, Pennsylvania; Providence, Rhode Island; Springfield, Illinois; Madison, Wisconsin; St. Paul and Minneapolis, Minnesota; Bismarck and Mandan, North Dakota; Sioux Falls, South Dakota; Wichita Falls, Texas.

IN ORDER to secure a wide range of experience, there are a number of variations in the method by which families secure blue stamps. In Rochester, the plan provides for the sale of orange stamps to people on relief, WPA workers, and others certified by relief agencies at the rate of a

minimum of \$1.00 and a maximum of \$1.50 per person per week. These stamps are exchangeable for food and other household commodities generally sold in retail food establishments. With each purchase of orange stamps, the purchaser receives blue stamps totaling one-half the value of the orange stamps purchased. These are exchangeable only for foods designated as surplus commodities by the Secretary of Agriculture. The orange stamps generally cover the usual expenditures for food of the average person receiving public assistance. The blue stamps, therefore, are an increase in the total amount of money likely to be spent for foods.

In other cities this plan is varied in accordance with the relief assistance granted. Thus in areas where food vouchers are issued to relief cases, no orange-stamp purchases are required in order to secure blue stamps, since the food vouchers already cover regular food expenditure. In areas where very little cash relief is granted, blue stamps are issued without any orange stamp purchases. Over the country, as a whole, it was found that on the average families receiving public assistance were spending about 5 cents per person for each meal. The stamp plan seeks to increase this average to 7½ cents per person.

Preliminary Estimate of Percentage Distribution of Commodities Secured With Blue Stamps in Six Areas

[May 16-Sept. 30, 1939]

Commodity	May 16-July 15			July 16-Sept. 30						
	Rochester	Dayton	Seattle ¹	Rochester	Dayton	Seattle	Birmingham	Pottawatomie County	Des Moines	Estimated national average ²
	1	2	3	4	5	6	7	8	9	10
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Butter.....	33.2	23.3	33.5	30.4	20.9	31.7	14.6	12.4	22.1	24.0
Eggs.....	30.6	30.3	33.7	27.8	23.5	26.5	20.4	13.1	19.4	23.6
White and graham flour.....	8.2	8.3	14.4	9.3	8.9	11.8	22.6	28.9	16.1	13.3
Corn meal.....	.5	2.6	1.0	.4	1.8	.9	7.5	5.7	1.4	2.1
Rice.....	2.0	2.9	3.4	1.3	2.4	2.0	3.2	3.6	2.1	2.1
Dried prunes.....	19.4	20.8	4.3	1.1	2.1	2.0	2.4	5.3	2.3	2.1
Oranges.....	3.7	7.2	5.0							
Grapefruit.....				9.3	11.7	10.8	6.1	7.3	13.6	10.0
Peaches.....				.9	3.5	1.2	3.1	1.1	6.1	2.4
Pears.....										
Total fruits.....	25.1	30.9	12.7	11.3	17.3	14.0	11.6	13.7	22.0	14.5
Dry beans.....	2.4	4.6	4.7	1.4	4.4	2.5	6.6	11.0	5.6	4.1
Cabbage.....				3.5	3.7	1.0	2.5	4.5	3.1	3.2
Peas.....				1.7	3.2	.7	3.3	.4	1.0	2.0
Tomatoes.....				9.4	9.6	6.7	5.6	4.2	2.7	7.7
Onions.....				3.5	4.3	2.2	2.1	2.5	4.5	3.4
Total vegetables.....	2.4	4.6	4.7	19.5	25.2	13.1	20.1	22.6	16.9	20.4
Total fruits and vegetables.....	27.5	35.5	17.4	30.8	42.5	27.1	31.7	36.3	38.9	33.9
Total all commodities.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Seattle data during this period very rough.

² Distribution in each city weighted by number in 1939 receiving public assistance in States surrounding these cities.

Source of data: Economic Analysis Section, Stamp Division, Federal Surplus Commodities Corporation.

THE BLUE stamps are used for surplus agricultural commodities specified by the Secretary of Agriculture. Up to November 30, the surplus list had been changed three times in accordance with changes in the agricultural situation. Since May the list has included butter, eggs, dry beans, rice, dried prunes, raisins, white and graham flour, oranges, grapefruit, fresh pears, fresh peaches, apples, dried onions, corn meal, pork lard, snap beans, cabbage, fresh tomatoes, and green peas. The list has been changed from time to time in accordance with changes in the season and the economic factors affecting the commodities.

Up to November 1, approximately 173 thousand persons in 8 cities took part in the program. These families received about \$1,272,000 in blue stamps for surplus purchases. Participation, which is voluntary, increased steadily in each area as people came to understand its operation. By the end of October, 70 to 86 percent of the eligible cases were participating. The smallest participation has been among one-person families who frequently do not have household facilities to take advantage of the program. Excluding one-person families, the participation varied between 73 percent of the eligible cases to over 86 percent.

In accordance with the congressional authorization, an experiment is being conducted in one city in Oklahoma to include non-relief low-income families in the program. It is designed to provide experience in the economic, social, and administrative consequences of such an endeavor. No expansion in this type of activity is contemplated until the experiment is analyzed fully.

THE Federal Surplus Commodities Corporation, in cooperation with the Bureau of Agricultural Economics and the Bureau of Home Economics,

is conducting a study of the economic, marketing and dietary aspects of the new program. It is too early to draw final conclusions as to the ultimate significance of this method of distributing surplus commodities. Some of the preliminary information is of particular interest in indicating how persons getting public aid are using their blue stamps on a wholly voluntary basis, and what this might mean for agriculture.

Based on experience in six areas up to September 30, about one-quarter of the stamps were being used for butter and another one-quarter for eggs. About 13 percent of the average purchasing power was being used for wheat products. Approximately 34 percent was being divided among the fruits and vegetables according to the consumers' selections and the commodities which have been on the list thus far. Corn meal and rice were each receiving over two percent of the blue stamp expenditure as a result of the new buying by needy families. (See attached table.) In October pork lard was added to the list and during the first 4 weeks it accounted for about 10 percent of the total.

AS A PART of current operating procedure, careful attention is being given to the economic and marketing aspects of the program. It is not yet possible to draw final conclusions on the significance of this approach to agricultural problems. However, the information obtained is being analyzed in order to determine such matters as the commodities selected by consumers under the program, the volume being moved, changes in sales, price trends, and the probable effects of the program on individual commodities. It will be possible to make such information available from time to time in the future.

NORMAN LEON GOLD,
Farm Surplus Commodities Corp.

A Decade of Farm Legislation

More important Federal agricultural legislation has been enacted during the last 10 years than in all preceding periods combined. Predominant, of course, have been the Agricultural Adjustment Acts designed to raise agricultural prices and increase farm income. Fundamental has been the legislation directed toward conservation of the Nation's land and human resources, toward greater farm security and a better farm life. The accompanying article presents the principal objectives and a summary of legislation during the past decade.—Ed.

tween production and marketing. In the face of sustained agricultural production, the Farm Board proved ineffectual as a means of sustaining agricultural prices.

THE experience of the Farm Board, though tremendously costly, was not entirely valueless. It gave point to the realization of the futility of using indirect methods to cure fundamental dislocations. This led inevitably to the enactment of the Agricultural Adjustment Act (of 1933), as a direct assault upon low farm prices. The primary purpose was to effect a fair economic correlation between industrial and agricultural buying power.

Broadly stated, this primary purpose was to be accomplished by making rental-benefit payments to farmers who voluntarily reduced production of basic agricultural commodities. Payments were financed through an excise tax levied on the processing of any basic commodity on which benefit payments were to be made. The act also authorized the Secretary of Agriculture to enter into marketing agreements and to issue licenses to processors and others engaged in the handling of any agricultural commodity in interstate or foreign commerce.

IN 1934, a number of laws were passed supplementing and broadening the scope of the original Agricultural Adjustment Act (of 1933). The Jones-Connally Cattle Act of 1934 added cattle, peanuts, rye, flax, barley, and grain sorghums to the original list of basic commodities. This act authorized appropriations to effect surplus reductions and production adjustments in the dairy- and beef-cattle industries, a program for the elimination of diseased cattle, and the carrying out of the 1934 Drought Emergency Livestock Purchase Program.

The Bankhead Cotton Act of 1934 strengthened the Agricultural Adjust-

EARLY American farm legislation was directed primarily toward the encouragement of agricultural research and the regulation of unfair trade practices adversely affecting farmers and the public. Although the regulatory activities of the Department of Agriculture have continued to change during the past 10 years in response to changing needs (evidenced by the enactment of the Commodity Exchange Act of 1936 and the Federal Food, Drug and Cosmetic Act of 1939), post-depression agricultural legislation has been designed principally to make available effective governmental controls operating directly upon low agricultural prices.

As the depression deepened, it was seen that remedial Federal farm legislation must be undertaken to bolster farm prices. State action, through laws granting temporary moratoria on farm indebtedness, was inadequate to effect any fundamental solution of national price-dislocations. From 1929 to 1932, the Federal Farm Board approach to the solution of agricultural ills was undertaken. The theory was that orderly marketings would solve the farm problem. The fundamental difficulty was that this plan failed to realize the necessary correlation be-

ment Program with respect to cotton by adding to the voluntary acreage reduction approach of the Agricultural Adjustment Act a control over the volume of cotton marketed. Similar supplemental legislation affecting tobacco was enacted in the Kerr Tobacco Act of 1934.

The scope of the Agricultural Adjustment Act was broadened by the enactment of the Jones-Costigan Sugar Act of 1934. This act added sugar beets and sugarcane to the list of basic commodities covered by the original act and set up a quota system with respect to the importation and continental shipments of sugar. The De-Rouen Rice Act of 1935, amending the Agricultural Adjustment Act, authorized a rice program based on processing taxes and benefit payments to producers.

PRIOR to 1936, the pressing need for Governmental aid to encourage soil conservation was fulfilled in part by the agricultural adjustment programs which embodied numerous soil conserving features. The act of April 27, 1935, establishing the Soil Conservation Service, was designed to correlate the activities of State agencies and Federal agencies in effecting a more complete soil conservation program. Both the spending power of the Federal Government and the police power of the States were, by this act, mobilized toward this end.

Section 32, Public Law No. 320, Seventy-fourth Congress, provides the principal source of funds which has been utilized to effect the removal of price-depressing surpluses of agricultural commodities. This act appropriates funds for each fiscal year to the Secretary of Agriculture equal to 30 percent of the customs receipts. Such funds may be used to encourage domestic consumption of agricultural commodities by diverting them from the normal channels of trade. The Federal Surplus Commodities Corporation, a Government corporation chartered under the laws of Delaware

on October 4, 1933, has provided the principal vehicle by which surplus agricultural commodities have been purchased and donated to States for distribution to persons on relief.

FOLLOWING the invalidation of the rental-benefit provisions of the Agricultural Adjustment Act (of 1933) by the United States Supreme Court in *United States v. Butler* on January 6, 1936, the Soil Conservation and Domestic Allotment Act was enacted. This act continued to take the direct approach toward solving the agricultural problem, but the solution was sought primarily through payments for the adoption of land uses and farm practices which would conserve and build up soil fertility instead of through the adjustment of production or marketing.

Following the *Butler* decision, which clouded in doubt the legality of the sugar program under the Jones-Costigan Sugar Act, the Sugar Act of 1937, repealing the earlier sugar legislation, was enacted. This act invoked the Federal commerce power to regulate sugar marketings in interstate and foreign commerce by the imposition of quotas on the continental United States, the offshore possessions, and foreign countries. This act also provides conditional payments to producers of sugarcane and sugar beets who have not marketed in excess of a given quantity and who have met certain standards with respect to child labor and wage rates and who have performed certain soil conservation practices prescribed by the Secretary. Moreover, in the case of producers who are also processors, fair and reasonable prices for sugar beets and sugarcane must be paid in order to qualify for these payments.

IN ORDER to clarify further doubts as to the legal effect of the *Butler* decision upon the various provisions of the Agricultural Adjustment Act (of 1933), the Agricultural Marketing Agreements Act of 1937 was enacted. This act reenacted the marketing

agreement and order provisions of the original Agricultural Adjustment Act.

THE Bankhead-Jones Farm Tenant Act of 1937 is a milestone in governmental humanitarianism. This act is designed to conserve the human as well as the physical resources of the country. The fundamental causes of farm destitution are rooted deep in national economic dislocations, dislocations caused largely by the long existing state of unbalance between agricultural and industrial economies. As this state of unbalance was augmented during the depression, so farm destitution likewise increased. Entrusted originally to the Resettlement Administration, the program to ameliorate this condition is now the responsibility of the Farm Security Administration. Small loans are made to needy farm families who are otherwise without credit, and loans are accompanied by sufficient training in good farm practices to insure the best use of the money loaned.

The Farm Credit Administration has in recent years done much to relieve farm distress through reducing interest rates on farm indebtedness. Refinancing programs have been undertaken which have effected an appreciable reduction in farmers' annual interest payments. Moreover, as a result of recent legislation, interest rates on Federal Land-bank loans have been at 4 percent in recent years, the lowest rate on record.

THE Agricultural Adjustment Act of 1938 was enacted in the light of 2 years' experience with agricultural conservation programs under the Soil Conservation and Domestic Allotment Act. The Agricultural Adjustment Act of 1938 is designed, insofar as practicable, to assure farmers parity prices and income and embodies the all-weather ever-normal granary principle. The purposes of this act are to be accomplished by price-sustaining commodity loans, regulation of marketings of farmers when surpluses become excessive, and by providing

for parity payments. This new act strengthens the Soil Conservation and Domestic Allotment Act by direct amendment and by providing supplemental controls which tend to insure a better balance between supply and demand than would otherwise be the case because of increased unit production resulting from improved farm practices encouraged by the Soil Conservation Act.

The price-sustaining commodity loans referred to above have for several years been made by the Commodity Credit Corporation, a Government corporation chartered under the laws of Delaware. The Agricultural Adjustment Act of 1938 makes these loans mandatory for cotton, corn, and wheat under certain supply and price conditions.

THE Federal Crop Insurance Act of 1938 was a pioneering step in farm legislation. This act provides all-risk insurance to wheat farmers against losses in yield. Premiums and losses are payable either in wheat or its cash equivalent. Because the crop-insurance program provides for the payment of premiums in kind, wheat will be received by the Government in years of large yields and stored until such time as that wheat is paid out to farmers as indemnity in years of low yields. Obviously, the operation of this program tends to further the all-weather ever-normal granary principle.

IN SUMMARY, the last 10 years I have witnessed a fundamental shift from established norms of farm legislation. Under the impetus of new social concepts of the proper function of government, it has become the policy of government to concern itself with economic and social maladjustments. The action programs initiated by agricultural legislation of recent years were created to give form to these new concepts of governmental obligations.

ROBERT H. SHIELDS,
*Agricultural Adjustment Division,
Office of the Solicitor.*

Five Decades of Farm Taxes

PROPERTY taxes represent one of the major types of fixed charges that must be paid by farmers, and nearly nine-tenths of the farm property tax is levied against real estate. The revenue obtained from farm real estate taxes is used for a variety of purposes, but in most States more than one-half of such tax revenues finances school and highway activities.

For 5 decades farm real estate taxes per acre have in general increased. While the extent of change varies greatly between States, the 48 State trends in general have been consistent. During the 1890's taxes per acre fluctuated very little and ended the decade slightly lower than at the beginning. From 1900 to 1920 the movement was sharply upward, and during the decade of the Twenties there was a slight additional rise in nearly all States. From 1929 to 1934 a decline of about 36 percent occurred. From 1934 to 1937 there was an increase at about the same rate as during the 1920's. But in 1938 this slight rise ceased and preliminary indications are now that 1939 levies will average about the same as those of 1938.

Those general movements assume added significance when compared with related economic factors. The movement of the United States tax-per-acre series from 1890 to 1900 represents the averaging of divergent trends. In general, in the older, longer-settled regions such as New England, taxes were rising during this period, while in the newer regions taxes were changing very little, or even decreasing, because of the addition of new, low-value land to the area in farms. This is illustrated in part in the accompanying chart which shows that total farm real estate taxes were increasing during the 1890's while taxes per acre remained approximately constant.

FROM 1900 to 1914 agricultural conditions were improving. Competition from free land of good quality had virtually ceased, prices of farm products were showing a persistent tendency to rise, and local governmental services, notably education and highways, were being improved and expanded. During this 14-year period general wholesale prices rose 21 percent, and it is a fair assumption that the cost of specific governmental services increased somewhat similarly.

But farm real estate taxes per acre increased 91 percent during the same period, a great part of which increase can be accounted for only by expansion of services. How much benefit accrued directly to farmers from the increase obviously is important but is a separate question. The thing shown directly is simply the increased levy of taxes to meet governmental expenditures of some kind.

IN THE war period, 1914-18, farmers' real estate taxes increased approximately with wholesale prices. War-time governmental expansion was very largely Federal, and increased costs to local jurisdictions represented principally the higher levels of wages, salaries, and prices. The war over, however, rapidly rising expenditures by local governments appeared. The 1918 levies on farm real estate averaged 6 percent above the preceding year. In contrast, each of the next two annual levies represented an increase of more than 20 percent over the preceding levy.

Furthermore, in 1919 the level of State and local-government borrowing jumped to a new level, more than double the average for the period 1913-18, thus building up a future charge against the tax base, in addition to current levies. The sharp post-war rise in farm taxes was roughly in line with the movement in farm land

values. Farm incomes were relatively high, and local taxing jurisdictions undoubtedly were misled by the ease with which the high taxes were collected.

WITH THE depression of 1920 farm incomes declined to a point where taxes frequently were hard to collect, and farm land values began a downward trend which continued throughout the decade. Despite these facts the trend of taxes continued upward, although at a rate which averaged only 2 percent a year for the period 1921-29.

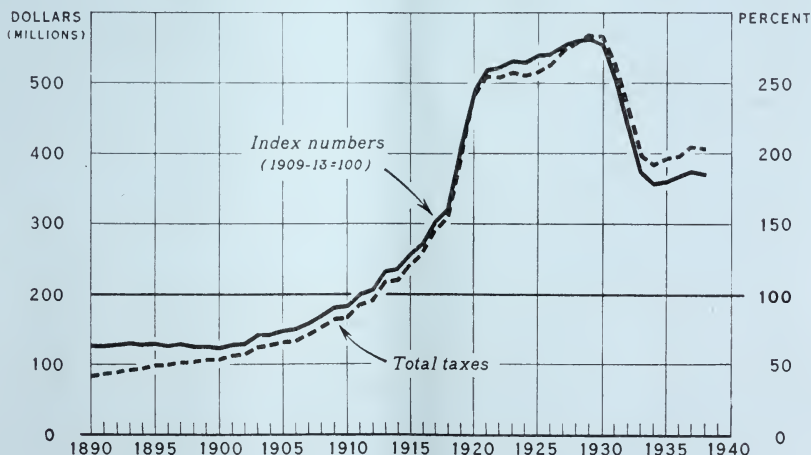
Several factors suggest that by 1920 the weight of average farm real estate taxes was as great as could well be imposed and collected. Net annual borrowings were remaining on the high level established in 1919, while in many jurisdictions tax delinquency was an increasing problem. In other words, larger future governmental costs were being assumed in a period when the property tax base already was seriously burdened to support current services. Furthermore, during the decade of the 1920's a large part of all highway costs was gradually shifted to automobile and gasoline taxes, of which by 1929 probably at least 100 million dollars annually was paid by farmers.

BETWEEN 1929 and 1934 real estate taxes per acre fell 36 percent, or to a point below the 1919 level. During the same period, however, land values correspondingly fell 31 percent and gross farm income per acre fell 45 percent, indicating an increase in the tax burden on farm income. The fact that rural tax delinquency trebled between 1928 and 1932 is evidence that the decrease in farm taxes was forced by the severity of the farmers' economic condition. Based on a sample of 700 counties, it appears that perhaps nearly one-half of the farm acreage was delinquent at one time or another during the period 1928-32.

Since 1934 taxes per acre have increased about 5 percent, while new delinquencies have decreased in number, and many old delinquencies have been paid. Numerous communities now appear to be currently collecting more in property taxes than they are currently levying, the excess coming from payments on account of earlier delinquency.

COMPARED with taxes per acre, total taxes levied against farm real estate show a greater increase over the period 1890-1938. In 1929, total taxes levied were 693 percent of those levied in 1890, while on a per-

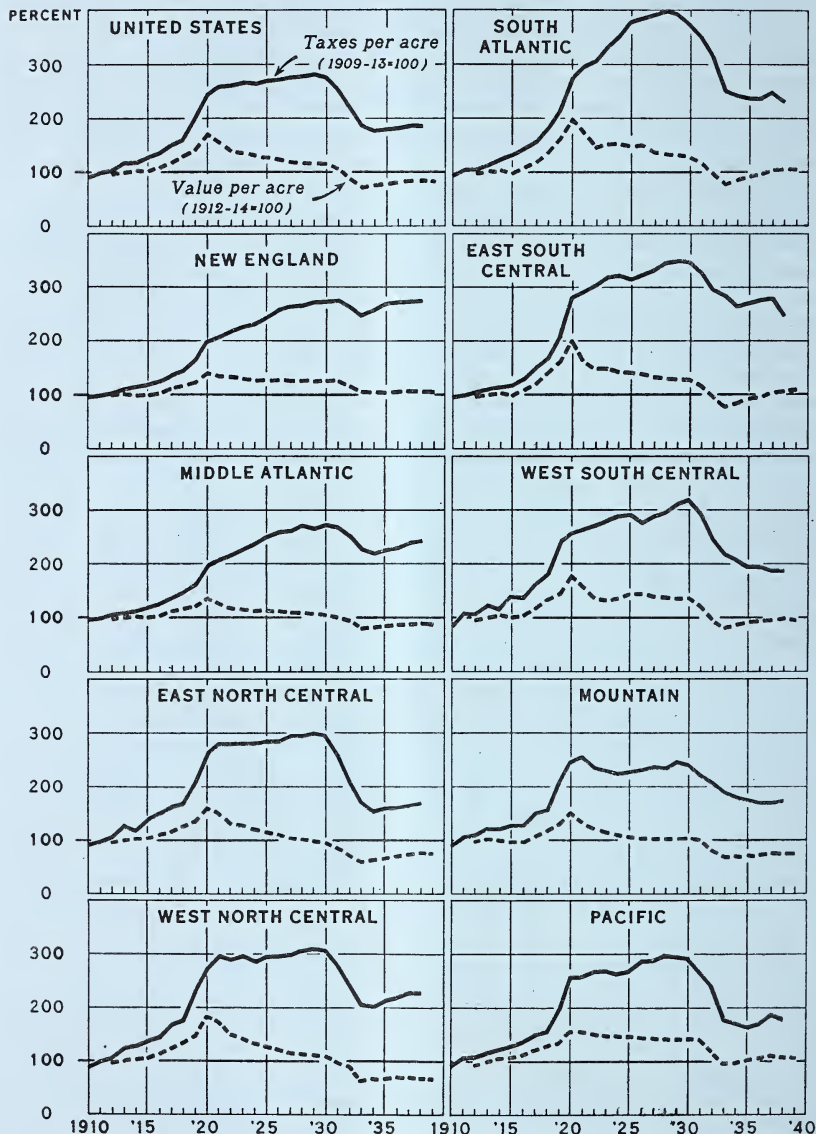
TOTAL FARM REAL ESTATE TAXES AND INDEX NUMBERS OF TAXES PER ACRE, UNITED STATES, 1890-1938



acre basis 1929 was 446 percent of 1890. Throughout the five decades there have been wide regional, State, and local differences both in taxes per

acre and in the resulting burden on land values. Nevertheless the trends in all States are of one general form. Despite the independence of the 48

FARM REAL ESTATE TAXES PER ACRE, 1910-38, AND VALUE PER ACRE, OF FARM REAL ESTATE, 1912-39



State property tax systems economic and social forces of Nation-wide scope seem to have been the principal determinants of the major movements. In general the historical trend since the pre-war base 1909-13, shows a gradation from the Northeast toward the West and toward the South. New England shows the most persistent upward movement of any division, with relatively great resistance to the downward pressure after 1929. The Middle Atlantic division shows a similar trend, but turns down more from 1929 to 1934.

IN THE South Atlantic division taxes rose after the World War more than elsewhere, but the States in that division started from a relatively low pre-war level. Since that time they have experienced various improvements and expansions in governmental services which already were under way in most other regions. It now appears, however, that increased expenditures in the South Atlantic States were carried to a degree which seriously burdened rural real estate. In the middle twenties nearly a third of the annual levies, in some counties, was devoted to local debt service. As a result of the excessive burden, decreases in taxes per acre in the late

1920's and early 1930's were relatively great.

The four Central divisions and the Pacific division all developed trends intermediate between those of New England and of the South Atlantic. The East North Central division was most typical for the country as a whole, in the sense that the movement of its tax rates per acre most closely corresponds to that for the United States. Toward the West and Southwest taxes rose more rapidly before 1929, as could be expected from the expanding governmental needs of new and scattered communities.

The Mountain division shows clearly one tendency which is suggested in several States, and in many communities elsewhere. This is the tendency to reach a peak in the early Twenties which was exceeded little if at all in later years.

FOR ALL divisions, and for nearly all States, 4 distinct movements in real estate taxes per acre stand out: An accelerating rise from 1900 through the war period; a high level and a small increase during the 1920's; a drop between 1929 and 1934 to a level below 1920; and a slight increase since 1934.

DONALD JACKSON.

People Eat Fewer Potatoes

PEOPLE are eating fewer potatoes now than they did 20 or 30 years ago. Fewer potatoes per person, that is, for total consumption has tended to increase little since 1909. While total consumption has risen slowly, the population has increased at a much faster rate.

Total consumption of potatoes for the years 1910-14 averaged about 283 million bushels. More recently, during the years 1933-37, consumption averaged about 297 million bushels—slightly higher. For the 1910-14 period, the population averaged only

about 96 million people. But during the 1933-37 period the population increased to an average of about 128 million people.

Consumption per person for the years 1910-14 averaged about 2.95 bushels. During the more recent 1933-37 period, consumption dropped to the low average of 2.32 bushels per person. This significant shift in the dietary habits of a nation has been a gradual process. The year to year variations in potato consumption, however, have followed an unbroken downward trend since 1909.

SEVERAL factors account for the declining per capita consumption of potatoes. Farmers are eating fewer homegrown potatoes. A large part of the total United States crop used to be grown on the general crop type farm. Part of the potato crop was sold and the remainder was stored in the cellar for home use. In years of large United States crops, when prices were low, rather large quantities were stored. When prices were high, farmers tended to sell a higher proportion of their crop. Farmers still grow potatoes for their own use, but to a decreasing extent. An increasing proportion of the total potato crop is being grown on the commercial type farm. The trend toward commercial production is especially noticeable in the States producing early potatoes.

Potatoes are an energy-producing food. Their high starch content makes them almost indispensable to people doing hard physical labor. But this is a machine age. Machinery is more and more replacing the work formerly done by hand. This is true of the farm, the factory, the railroad, and a great many other industries. Since energy-producing foods are no longer so necessary in the daily diet, there has been a gradual trend to other types of foods.

THE shift away from potatoes has been accompanied by a sharp increase in vegetable production, especially in the Southern States. In some areas of the South, and in California,

vegetables can be grown the year round. In most large cities fresh vegetables are available every month of the year. The rapid expansion of the frozen pack industry also has tended to increase the use of vegetables.

Per capita production figures for 13 major commercial vegetable crops show how the consumption of vegetables has increased. In 1918, the per capita production of these crops averaged 51 pounds. By 1937 it had risen to 87 pounds. The consumption of fruits—especially citrus fruits—has increased rapidly in recent years. The 1919-23 average per capita production of 13 fruits was 177 pounds. For the years 1934-38 production per person averaged 206 pounds.

THERE is some indication that the future increase in production of vegetables and fruits will not be as rapid as in the last 20 years. The upward trend in vegetable production has already begun to "flatten out." The increase in fruit production is dependent, in large part, on the number of new fruit trees planted. Available data indicate that trees are being planted at a slower rate than a few years ago.

There is a good possibility that per capita potato consumption will have a more stable relationship with consumption of other foods within a few years.

HARRY HENDERSON,
Agricultural Marketing Service.

The Anatomy of Domestic Demand

II. Industrial Production

INDUSTRIAL production or activity and the national income or purchasing power of consumers are the physical and money sources of domestic demand for farm products. The former is most commonly repre-

sented in analyses of individual farm products and of the agricultural situation as a whole by the Federal Reserve Board index of industrial production. This measure of activity (shown in the upper part of the accom-

panying chart) reflects, of course, parallel fluctuations in employment and consumer income.

The general contours of this measure of industrial activity during the last 20 years are well known. They include (a) the pronounced depressions of 1921 and the moderate recessions of 1924 and 1927, the great prolonged depression of 1929-32 and another relatively short depression in 1938, and (b) the prosperity peaks of 1919, 1923, 1926, 1929 and the peak of 1937. Little attention, however, has been given the great diversity of industrial fluctuations that are hidden within that single combination.

An anatomical examination reveals less consistency in the courses followed by the various industries represented in this composite measure of industrial activity than is usually assumed. Recognition of these broad differences has a special bearing in considerations of ways and means of attaining a more stable course of domestic demand, especially on the question as to relative merits of economic planning on an overall or selective basis.

IT HAS been pointed out frequently that the cyclical variations in industrial activity in general are due chiefly to the fluctuations in the production of so-called durable goods and only partly to the smaller fluctuations in the production of so-called nondurable goods. This is a useful distinction but it needs to be carried further. The great diversity hidden within any single composite of industrial activity can be seen by examining, for example, the extent of the changes between 1920 and 1921 in each of the items included in the commonly used Federal Reserve Board index of industrial production.

The index as a whole averaged 23 percent lower in 1921 than in 1920, but in the 40 or more industries included we find some that declined a great deal more and some that increased. Thus the production of beehive coke fell 73 percent, iron ore 68 percent, pig iron and zinc 55 percent,

steel ingots 53 percent, and locomotives 42 percent.

At the other extreme, silk consumption increased 46 percent, sheep slaughter 18 percent, cigarette consumption 15 percent, wool activity 11 percent, flour consumption 10 percent, and fuel-oil production 9 percent. In general, durable goods associated directly or indirectly with the iron and steel industry showed the greatest decline, and production of nondurable goods for current consumption showed the greatest increases—all in a year of a major depression.

THE MODERATE annual decline in industrial activity between 1923 and 1924 is represented by a decline of 6 percent in the Federal Reserve Board index of production. Some of the nondurable goods industries that had been relatively high in 1921 were now among the relatively low ones. Thus the production of locomotives fell 54 percent, beehive coke 43 percent, iron ore 28 percent, pig iron 22 percent, and steel ingot production 15 percent. Wool activity also was down by 17 percent and cotton textiles by 15 percent, whereas in 1921 these industries showed increases. The increases during this recession were 18 percent in gasoline, 16 percent in lead production, 15 percent in automobile tires and tubes, 11 percent in fuel oil, 10 percent in cigarette consumption, sugar milling and calf slaughter, and 9 percent in cement production.

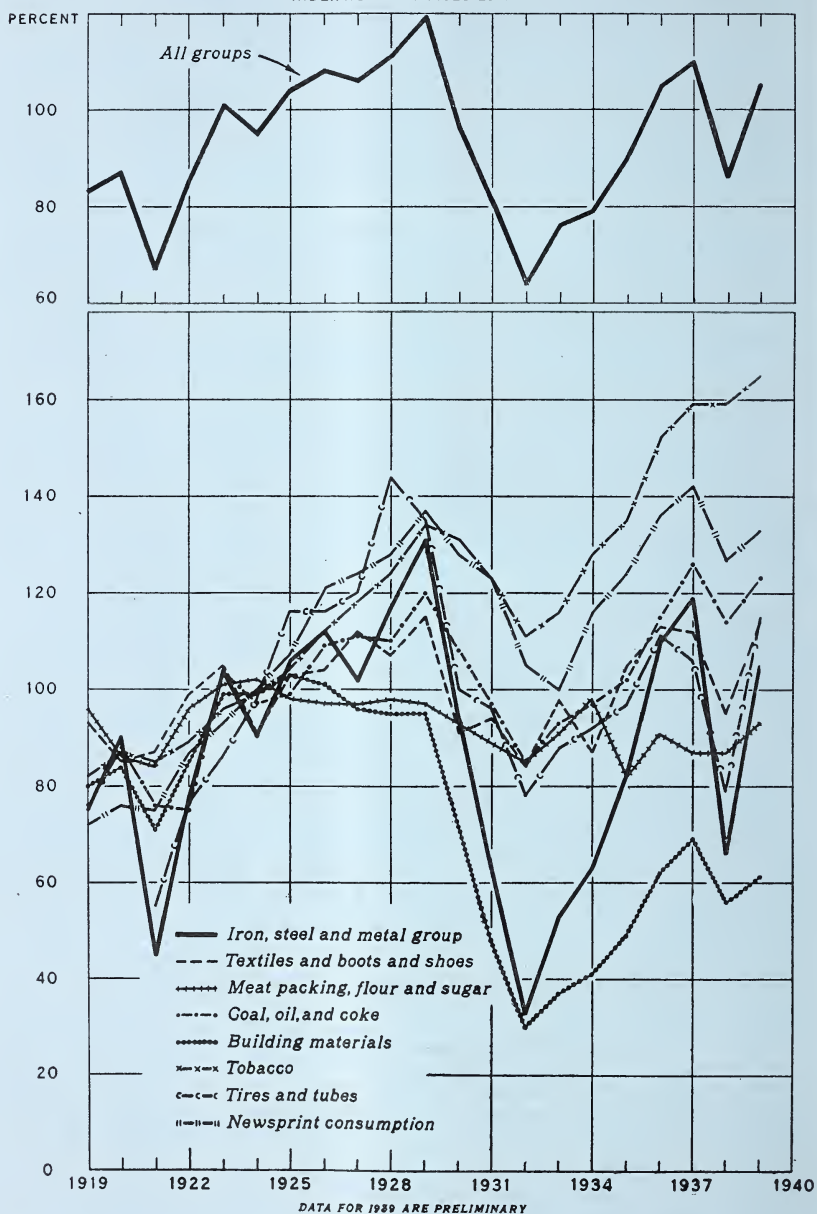
DURING the prolonged decline of 1929-32, the annual industrial production as a whole was reduced 46 percent. This decline was more general and practically no industries were able to show an increase in production; but relative to the average, there was in this period as in the others, great diversity. Industries showing the greatest curtailment included iron ore 94 percent, locomotives 88 percent, beehive coke 87 percent, pig iron 80 percent, steel ingots 76 percent, automobiles 74 percent, and lumber 72 percent.

Only two industries showed no decreases during this period: the slaughter of sheep was 28 percent greater in 1932 than in 1929 and of calves the

same as in 1929. But, there were a number of industries showing relatively small reductions in activities as compared with the average reduction of 46

INDUSTRIAL PRODUCTION, TOTAL, AND BY GROUPS, 1919-39

INDEX NUMBERS (1923-25=100)



percent. Hog slaughter declined 6 percent, cattle 8 percent, tobacco and snuff 8 percent, gasoline 10 percent, silk deliveries 11 percent, cigarettes 13 percent, boots and shoes 14 percent.

During the 1937-38 depression the diversity of changes in production was in some respects similar to that of 1920-21, in others to that of 1923-24, and in still others to that of 1926-27. The basic industries related to iron and steel and the industries producing building materials experienced curtailment in 1937-38 about as they did in 1921, textiles as in 1923-24, and meat packing and sugar refining about as in 1926-27.

A GENERAL impression of diversity of industrial fluctuations and trends may also be obtained by noting the course of activity for groups of industries for the 20-year period 1919-38. The items contained in the Federal Reserve Board index of production are shown in eight groups on the accompanying chart. These groups comprise 92 percent of the total index. It is clear at a glance that during the first 10 years after the World War each of these groups of industries pursued different long-time trends.

In 1920 most of these group indexes ranged between 84 and 90 percent of the 1923-25 average, or a spread of 7 percent; but by 1929 they ranged between 96 and 135, or a spread of nearly 40 percent. During the second 10-year period their courses diverged even more. In 1937 they ranged between 69 and 159 percent, or a spread of 130 percent.

Only one of the groups—iron and steel and related industries producing such items as coke and automobiles—looks consistently like the total. This group has about a 30 percent importance in the total and contributed most to the fluctuations in the total index in the depression years 1921, 1924, 1927, 1932, and 1938.

It is apparent, also, that some of the

groups did not correspond at all or only in part to the general appearance of industrial activity. Note, for example the indexes of production of textiles, processed farm products, and building materials.

Even greater complexity would be revealed by plotting the individual items in each of these groups.

THIS examination of diversity in industrial activity, limited to groups of industries, suggests an important fact with respect to stability in domestic demand and employment. It is that while there are common factors such as general purchasing power which affects all industries and makes them basically interdependent, there are other factors peculiar to each of the major industries and groups of industries that need to be taken into account in considerations of both general and specific ways and means of attaining greater economic stability. These factors will be discussed in subsequent articles.

L. H. BEAN.

The first article in this series appeared in the September 1939 issue.

FRUITS: Improved Demand

Consumer demand for fruit crops has improved in recent months. Prospects are for some further improvement in response to higher consumer buying power. But export demand will be curtailed, since large supplies of fruits are available in the major importing countries. This offset may cancel much of the favorable effect of increased buying power in the United States.

The tonnage of deciduous fruits is about 16 percent larger than in 1938, and equally above the 1928-37 average. The supply of dried fruits also is large. The total pack of canned fruits will be heavier than in 1938. Large crops of walnuts, almonds, and filberts were produced in 1939.

Economic Trends Affecting Agriculture

Year and month	Indus- trial pro- duction (1923- 25=100) ¹	Income of indus- trial workers (1924- 29=100) ²	Cost of living (1924- 29=100) ³	(1910-14=100)				Farm wages	Taxes ⁶
				Whole- sale prices of all commod- ities ⁴	Prices paid by farmers for commodities used in— ⁵				
					Living	Pro- duction	Living and produc- tion		
1925.....	104	98	101	151	164	147	157	176	270
1926.....	108	102	102	146	162	146	155	179	271
1927.....	106	100	100	139	159	145	153	179	277
1928.....	111	100	99	141	160	148	155	179	279
1929.....	119	107	99	139	158	147	153	180	281
1930.....	96	88	96	126	148	140	145	167	277
1931.....	81	67	88	107	126	122	124	130	253
1932.....	64	46	79	95	108	107	107	96	219
1933.....	76	48	76	96	109	108	109	85	187
1934.....	79	61	78	109	122	125	123	95	178
1935.....	90	69	80	117	124	126	125	103	180
1936.....	105	80	81	118	122	126	124	111	182
1937.....	110	94	84	126	128	135	130	126	187
1938.....	86	73	82	115	122	124	122	124	186
1938—July.....	83	69	83	115	.....	.....	123	129	.....
.....August.....	88	72	82	114	.....	.....	122	.....	.....
.....September.....	90	75	82	114	121	122	121	.....	.....
.....October.....	96	76	82	113	.....	.....	121	126	.....
.....November.....	103	78	82	113	.....	.....	121	.....	.....
.....December.....	104	80	82	112	120	122	120	.....	.....
1939—July.....	101	80	81	110	.....	.....	120	126	.....
.....August.....	103	83	81	109	.....	.....	119	.....	.....
.....September.....	111	85	82	115	122	123	122	.....	.....
.....October.....	⁷ 120	90	82	116	.....	.....	⁷ 122	126	.....
.....November.....	.....	.....	.....	⁷ 116	.....	.....	⁷ 122	.....	.....

Year and month	Index of prices received by farmers (August 1909–July 1914=100)							Ratio of prices received to prices paid
	Grains	Cotton and cotton-seed	Fruits	Truck crops	Meat animals	Dairy products	Chickens and eggs	All groups
1925.....	157	177	172	153	140	153	163	156
1926.....	131	122	138	143	147	152	159	145
1927.....	128	128	144	121	140	155	144	139
1928.....	130	152	176	159	151	158	153	149
1929.....	120	144	141	149	156	157	162	146
1930.....	100	102	162	140	133	137	129	126
1931.....	63	63	98	117	92	108	100	87
1932.....	44	47	82	102	63	83	82	65
1933.....	62	64	74	105	60	82	75	70
1934.....	93	99	100	103	68	95	89	90
1935.....	103	101	91	125	118	108	117	108
1936.....	108	100	100	111	121	119	115	114
1937.....	126	95	122	123	132	124	111	121
1938.....	74	70	73	101	114	109	108	95
1938—July.....	72	71	79	99	123	101	103	95
.....August.....	62	69	78	92	115	102	105	92
.....September.....	63	69	75	107	117	104	118	95
.....October.....	60	72	70	107	111	107	124	95
.....November.....	60	73	71	102	111	109	131	94
.....December.....	63	70	73	108	109	112	127	96
1939—July.....	66	73	80	101	107	96	89	89
.....August.....	64	71	70	101	101	100	90	88
.....September.....	83	76	73	114	117	107	102	98
.....October.....	77	74	73	128	112	112	108	97
.....November.....	79	75	66	130	107	117	117	97

¹ Federal Reserve Board, adjusted for seasonal variation.

² Adjusted for seasonal variation.

³ Monthly indexes for months not reported by the Bureau of Labor Statistics are interpolated by use of the National Industrial Conference Board cost of living reports.

⁴ Bureau of Labor Statistics index with 1926=100, divided by its 1910-14 average of 68.5.

⁵ These indexes are based on retail prices paid by farmers for commodities used in living and production reported quarterly for March, June, September, and December. The indexes for other months are interpolations between the successive quarterly indexes.

⁶ Index of farm real-estate taxes per acre. Base period represents taxes levied in the calendar years 1909-13, payable mostly within the period Aug. 1, 1909-July 31, 1914.

⁷ Preliminary.